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IN THE CLAIMS:

1. to 11. (Canceled)

12. (New) A continuous process for producing a polyarylene sulfide, which comprises;

reacting an alkali metal sulfide and a halogenated aromatic compound to produce a polyarylene sulfide,

washing said polyarylene sulfide by adding a wash liquid to a reaction liquid formed during the above reaction, and

separating the mixture of the reaction liquid with the wash liquid into a polymer phase containing said polyarylene sulfide and a solution phase containing said wash liquid in a separation vessel, and

taking out the polymer phase, wherein a liquid level of the polymer phase and the solution phase in the separation vessel is detected by a vibratile process viscometer or a remote seal type differential pressure oscillator, and controlled at a desired position to prevent the solution phase from mixing with the polymer phase that is taken from the separation vessel.

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13. (New) The continuous process for producing a polyarylene sulfide of claim 12, wherein said vibratile process viscometer has a liquid-contact portion that contains an anti-corrosion material.

14. (New) The continuous process for producing a polyarylene sulfide of claim 13, wherein said anti-corrosion material is stainless steel, a hastelloy alloy, Ti, or a Ti alloy.

15. (New) The continuous process for producing a polyarylene sulfide of claim 12, wherein said remote seal type differential pressure oscillator has a liquid-contact portion that contains an anti-corrosion material.

16. (New) The continuous process for producing a polyarylene sulfide of claim 15, wherein said anti-corrosion material is stainless steel, a hastelloy alloy, Ti, or a Ti alloy.

17. (New) An apparatus for the continuous production of a polyarylene sulfide, which comprises a separation vessel for separating a polymer phase containing a polyarylene sulfide and

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a solution phase containing a wash liquid after the polyarylene sulfide is washed with the wash liquid, and

a vibratile process viscometer or a remote seal type differential pressure oscillator that is provided to said separation vessel to detect the liquid level of said polymer phase.

18. (New) A method for detecting a liquid level, which comprises measuring a viscosity of a first phase by a vibratile process viscometer, to detect a liquid level that is an interface between a first liquid phase containing a polyarylene sulfide and a second liquid phase that contains substantially no polyarylene sulfide.

19. (New) A method for detecting a liquid level, which comprises measuring a difference in density between a first phase and a second phase, to detect a liquid level that is an interface between a first liquid phase containing a polyarylene sulfide and a second liquid phase that contains substantially no polyarylene sulfide.